

Analysis Report

Report No.: 14100916HKG-001

The Equipment Under Test (EUT) is a Wireless Headphones. It can accept analog input source (3.5mm phone jack aux-in) and wireless Bluetooth device. The Bluetooth module in the EUT is operating in the frequency range from 2402MHz to 2480MHz (79 channels with 1MHz channel spacing). The audio signal is fed to earphones. The EUT is powered by 3.6VDC internal rechargeable battery. The internal battery can be charged via USB port (5VDC). The USB port is for charging only without PC connectivity. The NFC tag is a passive device (for Bluetooth pairing) as declared by the applicant.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 98.8dBμV/m at 3m

Maximum allowed field strength of production tolerance: +/- 3dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 101.8dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 4.54\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 4.54mW.

The SAR Exclusion Threshold Level:

= $3.0 \cdot (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}}$

= $3.0 \cdot 5 / \sqrt{2.480} \text{ mW}$

= 9.53 mW

Since the above conducted output power is well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.